ReSound Alera TS™

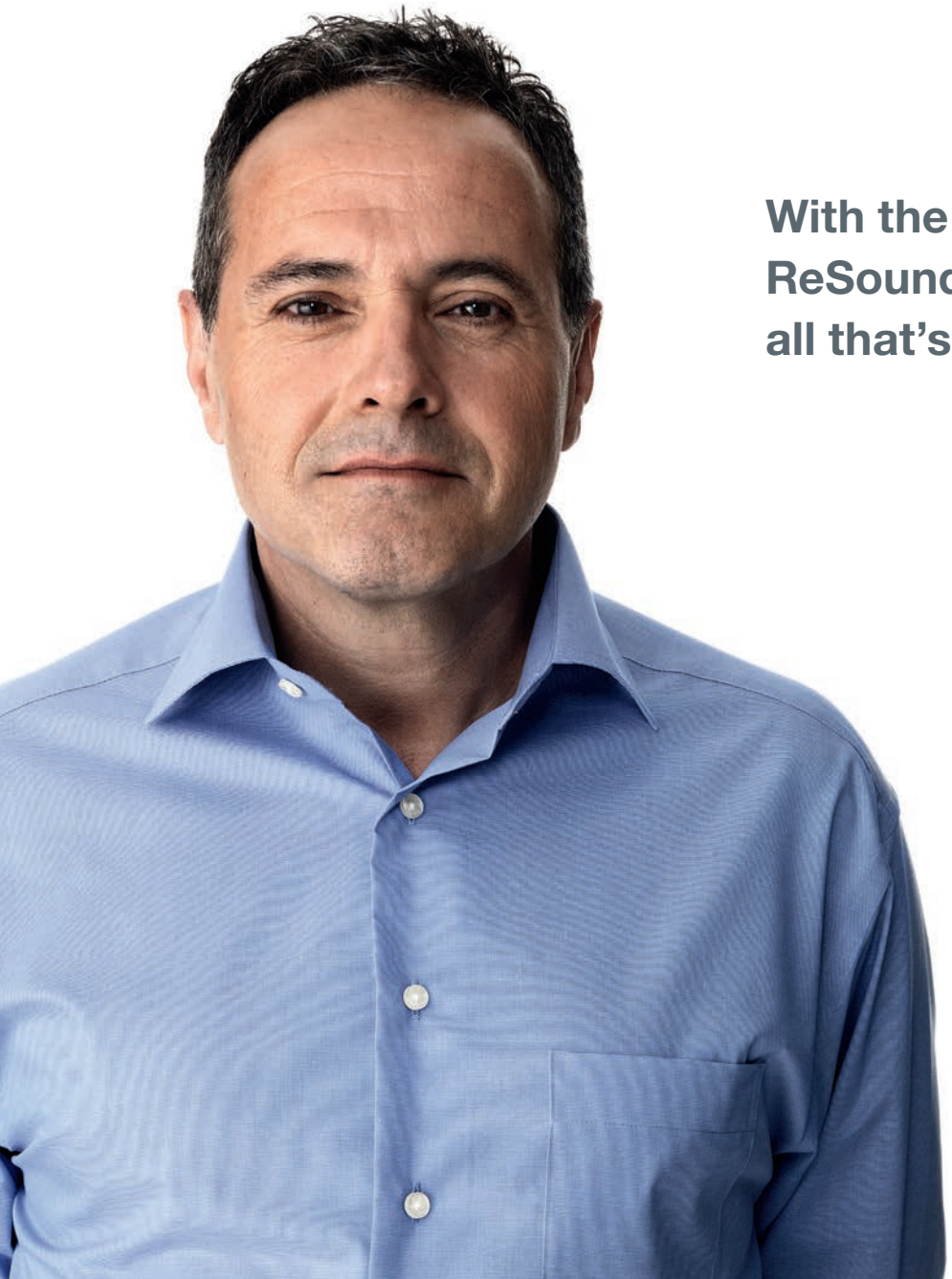
TINNITUS SOLUTION

Changing tinnitus management

ReSound

rediscover hearing

Until now, tinnitus patients have all too often been turned away with the disappointing message “Learn to live with it.” And tinnitus management has been limited to an assortment of masking options because technology hasn’t delivered the flexibility hearing healthcare professionals need.

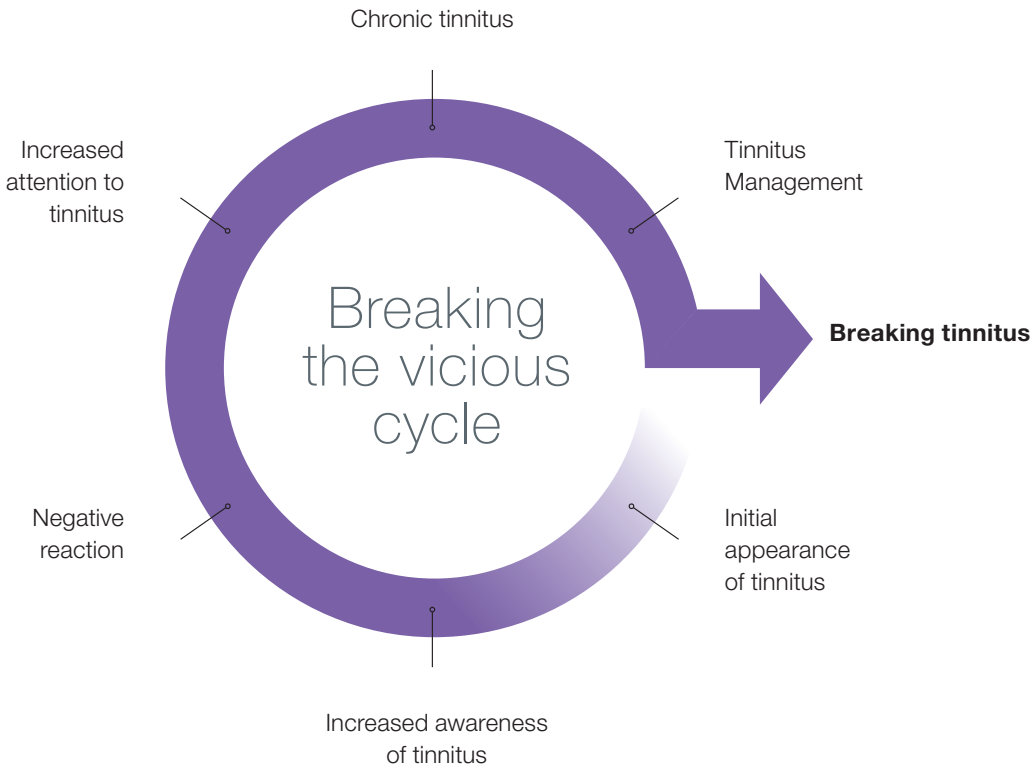


With the introduction of ReSound Alera TS™ all that’s going to change.

What is tinnitus?

Tinnitus – from the Latin verb “to jingle” – is an involuntary sound perception originating inside the head. For some, it is a high-pitched buzzing or ringing. For others, it is a hissing or roaring sound. It can be high or low, single or multi-toned, occasional or constant. It is as individual as people are.

The sound of tinnitus is usually softer than the sound of distant traffic, but it can be intolerable to the individual suffering from it. The severity very much depends on how much attention is paid to the unwanted sounds. In about 80-85% of cases, tinnitus is accompanied by hearing loss, but it can also be caused by exposure to loud sounds, accidents, ear infection, aging or stress. For some individuals, it is so disturbing that it interferes with work, relationships, sleep and general well-being.



The vicious cycle

Whatever the source of each individual case of tinnitus, the perceived sound causes varying degrees of annoyance and can trigger negative emotional reactions. Often the severity depends on how a person processes the tinnitus sound.

If the tinnitus is perceived negatively, there will be a negative emotional response. This heightens the brain’s awareness and more attention is paid to the intrusive sound. Once a negative connection is established, a cycle begins that includes the limbic and autonomic nervous systems. Anxiety, sleep disturbance, depression and poor concentration ensue, all of which reinforce the vicious cycle.

Using the ReSound Alera TS™ in combination with informed counseling and acoustic therapy can offer significant relief from tinnitus. You can change the way your patients respond to tinnitus and help create new paths in their acoustic neural network.

You can help them break the vicious cycle.

ReSound Alera TS™ combines advanced hearing instrument technology with a **flexible**, **innovative** tinnitus therapy tool. It helps manage tinnitus in a new and **individual** way.

Customized relief
Each case of tinnitus is unique. ReSound Alera TS™ provides individual solutions for individual problems. Sound processing features like Frequency Shaping and Amplitude Modulation allow flexible, personalized fittings using the ReSound Aventa® fitting software.

ReSound Alera TS™ also features Environmental Steering™, a patented technology that automatically adjusts the level of the sound generator so that it constantly adapts to the environment. ReSound Alera TS™ helps provide customized relief in most listening situations.

Unlimited possibilities
The ReSound Unite® family of wireless accessories uses 2.4 GHz technology to send crystal clear sound from TVs, mobile phones, computers and many other audio sources directly to the ReSound Alera TS™ hearing instrument from up to 20 feet away.

What's more, the ReSound Unite® Mini Microphone allows the user to stream any sounds uploaded to an iPod® or MP3 player, for example, directly into the hearing instrument. With today's overabundance of cybersources, the possibilities for downloading effective distracting sounds are infinite.

ReSound Alera TS™ makes a real difference
Tinnitus is as individual as people are. Currently nothing can cure tinnitus, but ReSound Alera TS™ can make a real difference in your patients' lives by offering unique individualized solutions.

A well-informed patient handles tinnitus better
You can reinforce the genuine assistance and relief provided by the advanced ReSound Alera TS™ technology by empowering your patients. We can supply you with professional counseling tools to help patients understand and manage their tinnitus.

Another convenient feature of ReSound Alera TS™ is the datalogging function. In conjunction with the ReSound Aventa® fitting software, you can gather usage data and build a user profile. This is a very practical and helpful tool in the trial-and-error process of finding the optimal settings for your patient.

ReSound Alera TS™ products

ALT960 *ALT961*

The Small

The small size and slim, curved shape of ReSound Alera TS™ Mini and Micro RIEs makes it very discreet. It comes in a selection of colors so it blends in with your patients' hair or skin color.

ALT962
ALT762

The Flexible

ReSound Alera TS™ RIE includes a multifunction button that allows customizable options for volume control, programs and ReSound Unite® wireless accessories.

ALT977/87
ALT777/87
ALT577/87

The Powerful

ReSound Alera TS™ Transitional BTE is a powerful yet attractive BTE. It's easy to handle and it has a slim, ergonomic design and volume control.

ALT967
ALT767

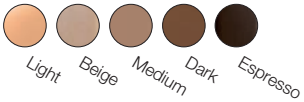
The Classic

ReSound Alera TS™ Mini BTE is a classic shape interpreted in a small, new design. It has all the benefits of standard BTEs in a compact and very appealing design.

ALT930-M
ALT730-M
ALT530-M

The Custom

ReSound Alera TS™ Custom Remote Microphone is a custom solution offering the benefits of superior wind noise reduction.



All ReSound Alera TS models are suitable for mild to severe hearing losses.

Key features*	ReSound Alera TS™ TINNITUS SOLUTION 9	7	5
ReSound Range™ platform	●	●	●
Surround Sound by ReSound™			
Warp™ compression bands	17	17	9
Directional Mix (surround sound) processor (•) —with adjustable directional mix (••)	●●	●	●
DFS Ultra™—with built-in WhistleControl™	●	◉	○
NoiseTracker™ II (◉ or ○) —with personalized noise reduction per environment (••)	●●	◉	○
Personalization			
Environmental Optimizer™ II	●		
Onboard Analyzer™ II datalogging	●	●	●
Programmable volume control[1]	●	●	●
Speech understanding			
Natural Directionality™ II	●		
AutoScope Adaptive Directionality™	●		
MultiScope Adaptive Directionality™	●	●	
Adaptive Directionality			●
SoftSwitching™	●	●	●
Fixed Directionality	●	●	●
Protection			
WindGuard™	●	◉	
iSolate™ nanotech	●	●	●
Flexible fitting			
Gain handles	9	7	6
Up to 4 customizable programs	●	◉	○
In-situ audiometry	●	●	●
Delayed Activation (SmartStart™)	●	●	●
PhoneNow™ with auto-phone	●	●	●
Programmable telecoil and PhoneNow™ with auto-telecoil[2]	●	●	●
Direct Audio Input (DAI)/telecoil[2]	●	●	●
Expansion	●	◉	○
Wireless connectivity with ReSound Unite® series			
2.4 GHz wireless technology[3]	●	●	●
Wireless fitting with Airlink®[3]	●	●	●
ReSound Unite® Mini Microphone[3]	●	●	●
ReSound Unite® TV[3]	●	●	●
ReSound Unite® Remote Control[3]	●	●	●
ReSound Unite® Phone Clip[3]	●	●	●
Sound Therapy			
Tinnitus Sound Generator (TSG)	●	●	●
Environmental Steering™	●	●	●
Amplitude modulation and frequency shaping	●	●	●

● Ultimate ◉ Advanced ○ Standard

[1] *Accessible only via ReSound Unite Remote Control for ALT961 and ALT967*

[2] *Not included with ALT960 and ALT961*

[3] *Not included with ALT960*

* *Please note that wireless connectivity and other features are dependent on model, and that not all models are available at all three levels.*

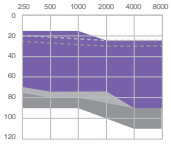
ReSound Alera TS™

TINNITUS SOLUTION

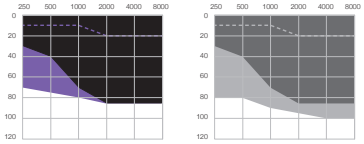
- Open configuration
- Closed/Classic configuration
- Power—Open configuration
- Power/ Power—Closed configuration
- Ultra power configuration

M = Remote microphone
P = Power
U = Ultra power
R = RIE (Receiver-in-the-ear)
NP = Normal power receiver
HP = High power receiver
D = Dual microphones
V = Volume control
I = Direct Audio Input (DAI)
W = Wireless technology

ITC
remote microphone



Micro and Mini RIE
(receiver-in-the-ear)



Technical specifications

ANSI S3.22-2003
2cc coupler

		ALT930/ ALT730/ ALT530- MW	ALT930/ ALT730/ ALT530- MPW	ALT930/ ALT730/ ALT530- MUW	ALT960-DR, ALT961-DRW NP Receiver Open	ALT960-DR, ALT961-DRW NP Receiver Closed	ALT960-DR, ALT961-DRW HP Receiver Open	ALT960-DR, ALT961-DRW HP Receiver Closed	
Reference test gain (60 dB SPL input)	HFA	33	36	47	30	32	35	35	dB
Full-on gain (50 dB SPL input)	Max	43	52	59	47	50	57	58	dB
	HFA	39	48	55	41	42	49	49	dB
Maximum output (90 dB SPL input)	Max	112	117	128	114	114	117	117	dB SPL
	HFA	109	113	124	108	108	112	112	dB SPL
Total harmonic distortion	500 Hz	0.3	0.5	0.4	0.8	0.8	0.7	0.8	%
	800 Hz	0.5	0.5	1.1	0.8	0.9	1.1	1.0	%
	1600 Hz	0.9	0.9	0.2	0.7	0.8	0.9	0.8	%
Telecoil sensitivity (SPLIV @ 31.6 mA/m)	HFA		96	107					dB SPL
Equivalent input noise (without noise reduction)		21	20	20	24	25	26	26	dB SPL
Frequency range (DIN 45605)		100–6830	100–6920	100–5370	100–6790	100–6720	100–7150	100–7140	Hz
Attack and release times (ANSI RTG -7 dB)	Attack	12	12	12	12	12	12	12	ms
	Release	70	70	70	70	70	70	70	ms
Current drain					non-W / W	non-W / W	non-W / W	non-W / W	
	Battery size 13								mA
	Battery size 312	1.2	1.2	1.2	1.2	1.2	1.2	1.2	mA
	Battery size 10A				1.1	1.1	1.1	1.1	mA

Tinnitus Sound Generator

TSG—Max overall output level	Max	91	88	91	88	88	88	88	dB SPL
TSG—Max A-weighted overall output level	Max	92	89	92	89	89	89	89	dB SPL
TSG—Max 1/3 octave output level	Max	86	84	87	85	85	85	85	dB SPL

ReSound Unite® Mini Microphone
The versatile ReSound Unite® Mini Microphone is a wireless clip-on microphone that transmits sound from various sources directly to your patient's hearing instruments. It provides audiological benefits that no hearing instrument alone can offer.

It also functions as a personal portable audio-streaming device that can be connected to just about any audio source via a mini-jack plug. This means that your tinnitus patient can play back whatever sounds they find most helpful directly into their hearing instruments—without wires, without wearing any additional devices, and without any hassle.

The ReSound Unite Mini Microphone can stream from TVs, computers, iPods/MP3 players and other sound systems.

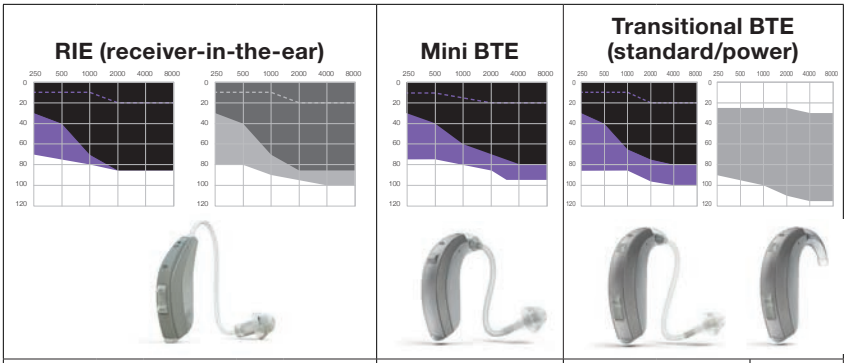
Facts:
- Size: 2.4 x 1.3 x 0.7 in
- Weight: 0.74 oz
- Rechargeable battery: 8.5 hours talk time
- Wireless streaming frequency: 2.4 GHz
- Audio streaming range: 5–20 ft

ReSound Alera TS™

TINNITUS SOLUTION

- Open configuration
- Closed/Classic configuration
- Power—Open configuration
- Power/ Power—Closed configuration
- Ultra power configuration

M = Remote microphone
P = Power
U = Ultra power
R = RIE (Receiver-in-the-ear)
NP = Normal power receiver
HP = High power receiver
D = Dual microphones
V = Volume control
I = Direct Audio Input (DAI)
W = Wireless technology



Technical specifications

ANSI S3.22-2003
2cc coupler

		ALT962-DVIRW, ALT762-DVIRW NP Receiver		ALT962-DVIRW, ALT762-DVIRW HP Receiver		ALT967-DIW, ALT767-DIW		ALT977-DVIW, ALT777/ALT577-DVIW		ALTx87-DVIW	
		Open	Closed	Open	Closed	Open	Classic	Open	Classic	Classic	
Reference test gain (60 dB SPL input)	HFA	30	32	35	35	36	41	39	45	49	dB
Full-on gain (50 dB SPL input)	Max	47	50	57	58	51	54	51	59	67	dB
	HFA	41	42	49	49	44	48	45	50	61	dB
Maximum output (90 dB SPL input)	Max	114	114	117	117	119	123	123	127	130	dB SPL
	HFA	108	108	112	112	113	117	117	122	127	dB SPL
Total harmonic distortion	500 Hz	0.8	0.8	0.8	0.7	0.5	2.0	0.2	0.7	2.0	%
	800 Hz	0.8	0.9	1.1	1.0	0.1	1.4	0.3	1.4	0.6	%
	1600 Hz	0.7	0.8	0.9	0.8	0.4	0.3	0.6	0.8	0.6	%
Telecoil sensitivity (SPLIV @ 31.6 mA/m)	HFA	90	91	96	96	96	99	100	106	111	dB SPL
Equivalent input noise (without noise reduction)		24	25	26	26	23	23	23	22	18	dB SPL
Frequency range (DIN 45605)		100–6790	100–6720	100–7150	100–7140	100–6920	100–6870	100–6740	100–6850	100–6400	Hz
Attack and release times (ANSI RTG -7 dB)	Attack	12	12	12	12	12	12	12	12	12	ms
	Release	70	70	70	70	70	70	70	70	70	ms
Current drain	Battery size 13							1.2	1.2	1.2	mA
	Battery size 312	1.2	1.2	1.2	1.2	1.2	1.2				mA
	Battery size 10A										mA

Tinnitus Sound Generator

TSG—Max overall output level	Max	88	87	88	88	86	92	90	92	98	dB SPL
TSG—Max A-weighted overall output level	Max	89	88	89	89	86	93	88	93	93	dB SPL
TSG—Max 1/3 octave output level	Max	84	84	85	85	81	83	84	87	83	dB SPL

ReSound Alera TS™ is flexible.

It can be programmed and used as:

- a combination hearing instrument and tinnitus sound generator
- a hearing instrument only
- a tinnitus sound generator only

ReSound Alera TS™

Key features	What they do for your patient
White Noise Generator	Proven as an effective stimulus for the relief of tinnitus
Frequency Shaper	Sound generator is individualized to provide maximum listening comfort and optimal relief from tinnitus
Volume Control of Noise	Manual control of sound generator
Environmental Steering™	Automatic control of sound generator level in every listening environment, without the need for manual adjustment
Amplitude Modulation	Customizes the noise generator for maximum comfort
Streaming of Sound Signals	Flexibility for providing therapeutic tinnitus sounds

ReSound

rediscover hearing

ReSound® provides excellent sound by offering innovative hearing solutions that combine original thinking and design with solid technology – all based on deep audiological insight and a profound understanding of the hearing impaired.

www.gnresound.com/AleraTS

ReSound North America • 8001 Bloomington Freeway, Bloomington, MN 55420 • 1-800-248-4327
Government Services: 1-800-392-9932 • VAinfo@gnresound.com

ReSound Canada • 303 Supertest Road • Toronto, Ontario M3J 2M4 • 1-888-737-6863

customerexperience@gnresound.com

ReSound and rediscover hearing are registered trademarks of The GN ReSound Group.
© 2011 The GN ReSound Group, all rights reserved.

MK603301 Rev.B 2011.11